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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,704	10/23/2003	Max Shtein	10020/29701	9763
23838	7590	07/22/2005	EXAMINER	
KENYON & KENYON 1500 K STREET NW SUITE 700 WASHINGTON, DC 20005			TUROCY, DAVID P	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/690,704	SHTEIN ET AL.	
	Examiner	Art Unit	
	David Turocy	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The applicant's amendments, filed 6/13/2005, have been fully considered and reviewed by the examiner. In light of the amendments to the claims, the claim objections and 35 USC 112 2nd paragraph rejections have been withdrawn. The examiner notes the added limitation to independent claim 1, and the amendment to claim 14 to depend from claim 1. The applicant has canceled claims 21-32, which were drawn to a non-elected invention. Claims 1-20 are pending.

Response to Arguments

2. Applicant's arguments filed 6/13/05 have been fully considered but they are not persuasive.

The applicant has argued against the Schmitt, stating the reference does not inherently result in a dynamic pressure as claimed by the applicant. The applicant argues Schmitt fails to disclose a pressure, different from the background pressure, in the region between the nozzle and the substrate surrounding the carrier gas. While the examiner agrees Schmitt does not explicitly disclose an existence of the dynamic pressure, the process of as taught by Schmitt must inherently have a dynamic pressure, i.e. in the process of Schmitt there exists a pressure in the region between the nozzle and the substrate, whether disclosed or not. The examiner notes the claimed limitations "at least" does not have an upper bound and therefore is inclusive of all pressures above 1 torr or 10 torr, as in claims 1 and 2 respectively. As stated by the applicant,

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Page 7 of papers filed 6/13/2005, the dynamic pressure is a function of the stream velocity and background pressure and since Schmitt discloses the same process steps, providing a stream velocity and background pressure as claimed by the applicant, it remains the examiners position that the results, i.e. the dynamic pressure, obtained by the applicants process must necessarily be the same as those obtained by the process of Schmitt. Either 1) the applicant and the prior art have different definitions for an background pressure or flow velocity, or 2) the applicant is using other process steps or parameters that are not shown in the claims.

The applicant has argued against the Schmitt reference stating the reference does not disclose a method utilizing a transition flow regime or a free molecular flow regime. The applicant argues Schmitt teaches of continuum flow, where the flow behaves as a fluid, rather than the claimed flow regimes, where the flow behaves as a gas. The examiner respectfully disagrees. Schmitt discloses, Col 15, lines 30-37, a flow regime of high Stokes Number may be desirable during a portion of the transport step. In addition, Schmitt discloses, at col. 19, line 49 – col. 20, line 13, a high Stokes Number results in an inability to maintain the flow in a continuum regime, but rather the coating material becomes "disentrained from the carriers continuum flow and pursue independent trajectories". Independent trajectories are a characteristic of a gas rather than a liquid, where the each particle travels in the same trajectory. Therefore Schmitt discloses the organic material is transported, at least for a portion of the flow, by a transition flow regime.

The applicant has argued against the Shah reference stating the reference teaches of an aerosol incapable of providing either the dynamic pressure or a flow regime as claimed. However, the examiner is only utilizing Shah in this instance as a teaching that it is known in the art of jet spraying to utilize a shroud gas to effectively screen, direct, and/or shape the coating spray toward the substrate. Taking the references collectively, it would have been obvious to one of ordinary skill in the art to modify Schmitt to include a shroud gas as taught by Shah to reap the benefits of a more defined spray pattern. Please note that the test of obviousness is not an express suggestion of the claimed invention in any or all references, but rather what the references taken collectively would suggest to those of ordinary skill in the art presumed to be familiar with them (*In re Rosselet*, 146 USPQ 183).

Claim Rejections - 35 USC § 112

3. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 and 11 include a newly added limitation wherein the organic material is transported by a free molecular flow regime appears to be new matter. The examiner has reviewed the specification including the passages disclosed by the applicant as supporting such an amendment, however, the examiner cannot ascertain support for

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transporting using a free molecular flow regime. It appears the specification properly supports a transition flow regime, as discussed in paragraph 0033 and 0041, however, each paragraph discloses the flow regime is a transition between the continuum and molecular flow, i.e. a transition flow regime. However, there is no indication in the specification that the regime reaches the molecular flow and therefore the specification does not reasonably convey the inventors, at the time the applicant was filed, had possession of the claimed invention.

The other dependant claims do not cure the defects of the claims from which they depend.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 10, 14-18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4788082 by Schmitt ("Schmitt").

Claims 1-3, 10, 14-18, and 20 remain rejected for the same reasons set forth in the office action dated 2/11/2005 and for the reasons set forth in section 2 above.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 4-5, 6, 9, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4788082 by Schmitt ("Schmitt") in view of US Patent 6468605 by Shah et al. ("Shah").

Claims 4-5, 6, 9, and 11-12 remain rejected for the same reasons set forth in the office action dated 2/11/2005 and for the reasons set forth in section 2 above.

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9. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4788082 by Schmitt ("Schmitt") in view of US Patent 6468605 by Shah et al. ("Shah") and further in view of Kirk-Othmer Vacuum Technology "Kirk-Othmer".

Claims 7 and 8 remain rejected for the same reasons set forth in the office action dated 2/11/2005 and for the reasons set forth in section 2 above.

10. Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4788082 by Schmitt ("Schmitt") in view of US Patent 6468605 by Shah et al. ("Shah") and further in view of US Patent 5709906 by Bickford et al. ("Bickford").

Claims 13 and 19 remain rejected for the same reasons set forth in the office action dated 2/11/2005 and for the reasons set forth in section 2 above.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Turocy whose telephone number is (571) 272-2940. The examiner can normally be reached on Monday-Friday 8:30-6:00, No 2nd Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Turocy
Au 1762



TIMOTHY MEEKS
SUPERVISORY PATENT EXAMINER